



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0487; Directorate Identifier 2010-SW-056-AD]

RIN 2120-AA64

Airworthiness Directives; Eurocopter France Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for Eurocopter France (Eurocopter) Model AS332L2 and EC225LP helicopters. This proposed AD would require inspecting the torque value of the bolts that secure the front and rear main gearbox (MGB) suspension bar attaching fittings, and re-torquing the bolts to the proper value if the torque value is out of tolerance. This proposed AD would also require, if the torque value is out of tolerance by more than 20 percent, inspecting the bolts, frames, and related equipment for a crack and repairing or replacing them if cracked. This proposed AD is prompted by reports of cracks on Frame 5295 of Model AS332L2 helicopters. These actions are intended to detect the torque loss of the bolts that secure the MGB bar attaching fittings and to prevent cracks that could lead to failure of the MGB supporting structure, detachment of the MGB, and loss of helicopter control.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.
- Fax: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.eurocopter.com/techpub>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

FOR FURTHER INFORMATION CONTACT: Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email gary.b.roach@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

Discussion

Direction Générale de l'Aviation Civile (DGAC), the aviation authority for France, has issued AD No. F-2006-020 for Model AS 332 L2 helicopters and AD No. F-2006-021 for Model EC 225 LP helicopters, both dated February 1, 2006, to correct an unsafe condition in those model helicopters. The DGAC ADs require conducting visual checks after the last flight of each day for cracks in the outer skin paneling and the butt strap of the MGB sliding cowling left and right attachment points on Frame 5295. If a crack is found in the outer skin paneling Zone 2, then the DGAC ADs require visually inspecting the corresponding Zone 2 of Frame 5295 for a crack

and suspending all flights if a crack is found. If no crack is found through visual inspections, the DCAG ADs provide instructions for further inspections and repairs. Issues with the outer skin paneling were resolved by the time the FAA certificated the EC225 on January 30, 2008.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, issued AD No. 2006-102-E, which superseded DGAC AD F-2006-021, and AD No. 2006-103-E, which superseded DGAC AD F-2006-020. Both EASA ADs are dated April 25, 2006. AD Nos. 2006-102-E and 2006-103-E retain the requirements of the DGAC ADs but expand the area to be inspected.

EASA then issued AD No. 2006-0163, dated June 9, 2006, to supplement the requirements of AD Nos. 2006-102-E and 2006-103-E by mandating that the bolts securing the front and rear of the MGB bar attaching fittings be inspected for tightening torque loss. According to EASA, analysis of the tightening torques revealed some cases of tightening torque loss, which can lead to the formation of a crack at the MGB bar attaching fittings. EASA subsequently issued AD No. 2006-0163 R1, dated December 13, 2007, which revises and replaces AD No. 2006-0163, retaining its requirements but extending the compliance interval for inspecting the bolts on Model EC 225 LP helicopters.

FAA's Determination

These helicopters have been approved by the aviation authority of France and are approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, its technical representative, has notified us of the unsafe condition described in its AD. We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition is likely to exist or develop on other products of the same type design.

Related Service Information

We reviewed Eurocopter Alert Service Bulletin (ASB) No. 05.00.65, Revision 0, dated March 28, 2006, for Model AS332L2 helicopters, and ASB No. 05A002, Revision 1, dated December 6, 2007, for Model EC225LP helicopters. The ASBs specify inspecting the tightening torque of the bolts that secure the front and rear of the MGB bar attaching fittings. If more than a 20 percent tightening torque load loss is discovered, the ASBs require inspecting the frames 3855 and 5295 for a crack in the area of the MGB bar attaching fittings. EASA classified these ASBs as mandatory and issued EASA AD No. 2006-0163 R1, dated December 13, 2007, to ensure the continued airworthiness of these helicopters.

Proposed AD Requirements

This proposed AD would require repetitively inspecting the tightening torque value of the bolts that secure the front and rear MGB suspension bar attaching fittings. If the torque value is out of tolerance 20 percent or less, then the proposed AD would require that each bolt be re-torqued to the proper value. If the torque value is out of tolerance more than 20 percent, then this proposed AD would require re-torquing each bolt to the proper value and inspecting the bolts, frame, and related equipment for a crack. If a cracked bolt is detected, this AD would require replacing all four attaching fitting bolts. If a crack in the frame or other equipment is detected, this proposed AD would require repairing or replacing the cracked frame and other equipment.

Differences between this Proposed AD and the EASA AD

This AD differs from the EASA AD in that we use the word “inspect” to describe actions required by a mechanic versus the word “check,” which is how we describe actions allowed by a pilot. We also require that if you find a crack in a frame or fitting, you repair or replace the cracked part instead of contacting the manufacturer. Also, we have different compliance times

for the initial inspection for the tightening torque of the bolts that secure the MGB attaching fitting.

Costs of Compliance

We estimate that this proposed AD would affect 4 helicopters of U.S. Registry and that labor costs would average \$85 a work-hour. Based on these estimates, we would expect the following costs:

- Inspecting the torque of each bolt that secures the front and rear MGB attaching fitting would require 1 work-hour and no parts for a total cost of \$85 per helicopter, and \$340 for the U.S. fleet.
- Readjusting the torque would add another 0.25 work-hour for a total cost of about \$21 per helicopter.
- Replacing all four nuts and bolts of an attachment fitting would require 4 work-hours. Parts would cost \$1,000 for a total cost of \$1,340 per helicopter.
- Replacing the attachment fitting or plate would require 16 work-hours respectively. Parts would cost \$2,000 respectively for a total cost of \$3,360 to replace each part per helicopter.
- Replacing frames 3855 and 5295 would require 40 work-hours respectively. Parts would cost \$5,000 to replace each frame for a total cost of \$8,400 per frame per helicopter.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the

FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

EUROCOPTER FRANCE: Docket No. FAA-2013-0487; Directorate Identifier 2010-SW-056-AD.

(a) Applicability.

This AD applies to Eurocopter France (Eurocopter) Model AS332L2 and EC225LP helicopters, certificated in any category.

(b) Unsafe Condition.

This AD defines the unsafe condition as loss of tightening torque of a bolt that secures the front and rear main gearbox (MGB) suspension bar attaching fittings, which can change the loads on the frames and cause cracking. This condition could lead to failure of the MGB supporting structure, detachment of the MGB, and subsequent loss of control of the helicopter.

(c) Comments Due Date.

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(d) Compliance.

You are responsible for performing each action required by this AD within the specified compliance time unless accomplished previously.

(e) Required Actions.

(1) Within 500 hours time-in-service (TIS), and thereafter at intervals not to exceed 825 hours TIS, inspect the tightening torque of each bolt that secures the front and rear MGB attaching fitting by using as reference Figure 1 of Eurocopter Alert Service Bulletin (ASB) No. 05.00.65, Revision 0, dated March 28, 2006, for the Model AS332L2 helicopters; and ASB No. 05A002, Revision 1, dated December 6, 2007, for the Model EC225LP helicopters.

(2) If the loss of tightening torque of a nut is less than or equal to 20 percent of the minimum tightening torque, before further flight, readjust the tightening torque.

(3) If the loss of tightening torque of any nut (front or rear) is greater than 20 percent of the minimum tightening torque, before further flight:

(i) Inspect each bolt and nut that secures the attachment fitting for a crack, and

(ii) Inspect for a crack in the attachment area of the attachment fitting, the attachment plate, and Frame 3855 for the front fitting and Frame 5295 for the rear fitting.

(A) If no crack exists, readjust the tightening torque.

(B) If there is a crack in any nut or bolt, before further flight, replace all four nuts and bolts of the affected attachment fitting.

(C) If there is a crack in the attachment area of the attachment fitting or the attachment plate, before further flight, replace the cracked attachment fitting or plate with an airworthy fitting or plate.

(D) If there is a crack in Frame 3855 for the front fitting or Frame 5295 for the rear fitting, before further flight, repair or replace the frame.

(f) Alternative Methods of Compliance (AMOCs).

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email gary.b.roach@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

(g) Additional Information.

The subject of this AD is addressed in European Aviation Safety Agency AD No. 2006-0163 R1, dated December 13, 2007.

(h) Subject.

Joint Aircraft Service Component (JASC) Code: 6330, Main Rotor Transmission Mount. Issued in Fort Worth, Texas, on May 29, 2013.

Kim Smith,

Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.

